

Annual Emission Estimates  
GE 6FA Turbine

Case No.	Fuel	Ambient Temp	Turbine Load	Worst-Case Op Hours		NO <sub>x</sub>		CO		CO <sub>2</sub>		VOC		NH <sub>3</sub>		PM-10/PM-2.5		SO <sub>2</sub>		H <sub>2</sub> SO <sub>4</sub>	
				Hrs/yr	Hrs/yr	lbs/hr	tpy	lbs/hr	tpy	lbs/hr	tpy	lbs/hr	tpy	lbs/hr	tpy	lbs/hr	tpy	lbs/hr	tpy	lbs/hr	tpy
1	Natural Gas	-10	DB			4.9		10.0		53,848		1.7		3.0		6.9		1.5		0.4	
2	Natural Gas	-10	100			4.1		9.9		53,771		1.7		3.0		6.3		1.3		0.4	
3	Natural Gas	-10	75			3.3		7.9		42,815		1.4		2.4		5.1		1.1		0.3	
4	Natural Gas	-10	50			2.5		6.0		32,631		1.0		1.8		3.9		0.8		0.2	
5	Natural Gas	25	DB	1400	2000	5.0	3.5	6.0	6.0	55,402	38,781	1.8	1.8	3.1	2.2	7.1	4.9	1.5	1.1	0.4	0.3
6	Natural Gas	25	100		880	4.2	0.0	5.6	2.5	55,319		1.8	0.8	3.1		6.5		1.4		0.4	
7	Natural Gas	25	75			3.3		4.2		43,835		1.4		2.5		5.2		1.1		0.3	
8	Natural Gas	25	50			2.5		2.9		33,310		1.1		1.9		4.0		0.8		0.2	
9	Natural Gas	50	DB			5.2		2.6		56,532		0.7		3.2		7.2		1.5		0.4	
10	Natural Gas	50	100			4.3	14.5	2.2	6.6	56,445	190,783	0.7	2.1	3.2	10.7	6.6	22.5	1.4	4.8	0.4	1.4
11	Natural Gas	50	75			3.4		1.7		44,325		0.6		2.5		5.3		1.1		0.3	
12	Natural Gas	50	50			2.5		1.8		33,388		0.4		1.9		4.0		0.8		0.2	
13	Natural Gas	75	DB			5.1		2.2		56,355		0.7		3.2		7.2		1.5		0.4	
14	Natural Gas	75	100			4.3		1.8		56,268		0.7		3.2		6.6		1.4		0.4	
15	Natural Gas	75	75			3.1		0.6		41,257		0.5		2.3		4.9		1.0		0.3	
16	Natural Gas	75	50			2.4		0.7		31,463		0.4		1.8		3.7		0.8		0.2	
17	Natural Gas	85	DB			5.1		2.2		56,355		0.7		3.2		7.2		1.5		0.4	
18	Natural Gas	85	100			4.3		1.8		56,268		0.7		3.2		6.6		1.4		0.4	
19	Natural Gas	85	75			3.0		0.3		39,762		0.5		2.2		4.7		1.0		0.3	
20	Natural Gas	85	50			2.3		0.4		30,425		0.4		1.7		3.6		0.8		0.2	
21	#2 Fuel Oil	-10	DB			14.4		4.1		71,412		0.8		3.1		28.8		22.4		8.6	
22	#2 Fuel Oil	-10	100			13.5		4.1		71,310		0.8		3.1		28.6		22.3		8.7	
23	#2 Fuel Oil	-10	75			10.8		3.3		57,363		0.6		2.5		23.0		17.9		7.0	
24	#2 Fuel Oil	-10	50			8.3		2.5		43,838		0.5		1.9		17.6		13.7		5.3	
25	#2 Fuel Oil	25	DB	600		14.8	4.4	4.2		73,449	22,035	0.8		3.2	1.0	29.6	8.9	23.1	6.9	8.8	2.6
26	#2 Fuel Oil	25	100			13.9		4.2		73,291		0.8		3.2		29.5		23.0		8.9	
27	#2 Fuel Oil	25	75			11.1		3.4		58,619		0.6		2.6		23.5		18.3		7.1	
28	#2 Fuel Oil	25	50			8.4		2.6		44,636		0.5		1.9		17.9		14.0		5.4	
29	#2 Fuel Oil	50	DB			14.6		4.2		72,582		0.8		3.2		29.3		22.8		8.7	
30	#2 Fuel Oil	50	100			13.7		4.2		72,470		0.8		3.2		29.2		22.7		8.8	
31	#2 Fuel Oil	50	75			11.0		3.3		58,100		0.6		2.5		23.3		18.2		7.1	
32	#2 Fuel Oil	50	50			8.3		2.5		43,928		0.5		1.9		17.6		13.7		5.3	
33	#2 Fuel Oil	75	DB			14.6		4.2		72,434		0.8		3.2		29.3		22.8		8.7	
34	#2 Fuel Oil	75	100			13.7		4.2		72,322		0.8		3.2		29.1		22.7		8.8	
35	#2 Fuel Oil	75	75			10.4		3.2		55,161		0.6		2.4		22.2		17.3		6.7	
36	#2 Fuel Oil	75	50			7.9		2.4		42,033		0.4		1.8		16.9		13.1		5.1	
36	#2 Fuel Oil	85	DB			14.6		4.2		72,347		0.8		3.2		29.2		22.7		8.7	
38	#2 Fuel Oil	85	100			13.7		4.2		72,234		0.8		3.2		29.1		22.7		8.8	
39	#2 Fuel Oil	85	75			10.1		3.1		53,216		0.6		2.3		21.4		16.7		6.5	
40	#2 Fuel Oil	85	50			7.7		2.3		40,707		0.4		1.8		16.3		12.7		4.9	
TOTALS (Single Unit)						22.5		15.0		251,599		4.6		13.9		36.3		12.7		4.3	
TOTALS (Two Unit)						44.9		30.1		503,198		9.3		27.7		72.5		25.5		8.7	
Steam Boiler						1.8		4.2		5,988		0.3		NA		0.4		0.1		Neg	
Project Total						46.8		34.3		509,186.4		9.6		27.7		72.9		25.6		8.7	

Boiler #6 Emission Credits (2006-2007)	526.0	45.46	42.1	5.5	NA	278.4	3996.0	3.7
Net Emissions Increase/Decrease (tpy)	-479.2	-7.8	150,299.5	4.1	27.7	-205.4	-3970.3	5.0

PSD Applicability Threshold	40.0	100.0	NA	40.0	NA	15.0	40.0	7.0
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Nonattainment NSR Applicability Threshold (tpy)		NA	NA	NA	NA	NA	NA	NA
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UGI - Hunlock Creek  
GE LM6000 PC-Sprint  
Emissions Estimates  
Source of Data or Basis:

Case No.	Fuel	Ambient Temp. (°F)	Turbine Load	Inlet Chiller	Permit Limits													
					Combined Cycle Permit Limits													
					NO <sub>x</sub>		CO		VOC		NH <sub>3</sub>		PM-10/PM-2.5		SO <sub>2</sub>		H <sub>2</sub> SO <sub>4</sub>	
					ppmvd @15% O <sub>2</sub>	lb/hr	ppmvd @15% O <sub>2</sub>	lb/hr	ppmvd @15% O <sub>2</sub>	lb/hr	ppmvd @15% O <sub>2</sub>	lb/hr	lb/mmBtu HHV	lb/hr	lb/mmBtu HHV	lb/hr	lb/mmBtu HHV	lb/hr
1	NG	-10	DB		3.0	4.9	10.0	10.0	3.0	1.7	5	3.0	0.0141	6.9	0.0030	1.5	0.0009	0.43
2	NG	-10	100	Off	2.5	4.1	10.0	9.9	3.0	1.7	5	3.0	0.0141	6.3	0.0030	1.3	0.0009	0.39
3	NG	-10	75		2.5	3.3	10.0	7.9	3.0	1.4	5	2.4	0.0141	5.1	0.0030	1.1	0.0009	0.32
4	NG	-10	50		2.5	2.5	10.0	6.0	3.0	1.0	5	1.8	0.0141	3.9	0.0030	0.8	0.0009	0.24
5	NG	25	DB		3.0	5.0	10.0	6.0	3.0	1.8	5	3.1	0.0141	7.1	0.0030	1.5	0.0009	0.44
6	NG	25	100	Off	2.5	4.2	10.0	5.6	3.0	1.8	5	3.1	0.0141	6.5	0.0030	1.4	0.0009	0.40
7	NG	25	75		2.5	3.3	10.0	4.2	3.0	1.4	5	2.5	0.0141	5.2	0.0030	1.1	0.0009	0.32
8	NG	25	50		2.5	2.5	10.0	2.9	3.0	1.1	5	1.9	0.0141	4.0	0.0030	0.8	0.0009	0.25
9	NG	50	DB		3.0	5.2	4.0	2.6	1.2	0.7	5	3.2	0.0141	7.2	0.0030	1.5	0.0009	0.45
10	NG	50	100	Off	2.5	4.3	4.0	2.2	1.2	0.7	5	3.2	0.0141	6.6	0.0030	1.4	0.0009	0.41
11	NG	50	75		2.5	3.4	4.0	1.7	1.2	0.6	5	2.5	0.0141	5.3	0.0030	1.1	0.0009	0.33
12	NG	50	50		2.5	2.5	4.0	1.8	1.2	0.4	5	1.9	0.0141	4.0	0.0030	0.8	0.0009	0.25
13	NG	75	DB		3.0	5.1	4.0	2.2	1.2	0.7	5	3.2	0.0141	7.2	0.0030	1.5	0.0009	0.44
14	NG	75	100	On	2.5	4.3	4.0	1.8	1.2	0.7	5	3.2	0.0141	6.6	0.0030	1.4	0.0009	0.41
15	NG	75	75		2.5	3.1	4.0	0.6	1.2	0.5	5	2.1	0.0141	4.9	0.0030	1.0	0.0009	0.30
16	NG	75	50		2.5	2.4	4.0	0.7	1.2	0.4	5	1.8	0.0141	3.7	0.0030	0.8	0.0009	0.23
17	NG	85	DB		3.0	5.1	4.0	2.2	1.2	0.7	5	3.2	0.0141	7.2	0.0030	1.5	0.0009	0.44
18	NG	85	100	On	2.5	4.3	4.0	1.8	1.2	0.7	5	3.2	0.0141	6.6	0.0030	1.4	0.0009	0.41
19	NG	85	75		2.5	3.0	4.0	0.3	1.2	0.5	5	2.2	0.0141	4.7	0.0030	1.0	0.0009	0.29
20	NG	85	50		2.5	2.3	4.0	0.4	1.2	0.4	5	1.7	0.0141	3.6	0.0030	0.8	0.0009	0.22
21	#2 FO	-10	DB		8.5	14.4	4.0	4.1	1.3	0.8	5	3.1	0.0610	28.8	0.0474	22.4	0.0182	8.58
22	#2 FO	-10	100	Off	8.0	13.5	4.0	4.1	1.3	0.8	5	3.1	0.0660	28.6	0.0515	22.3	0.0200	8.68
23	#2 FO	-10	75		8.0	10.8	4.0	3.3	1.3	0.6	5	2.5	0.0660	23.0	0.0515	17.9	0.0200	6.97
24	#2 FO	-10	50		8.0	8.3	4.0	2.5	1.3	0.5	5	1.9	0.0660	17.6	0.0515	13.7	0.0200	5.32
25	#2 FO	25	DB		8.5	14.8	4.0	4.2	1.3	0.8	5	3.2	0.0610	29.6	0.0475	23.1	0.0182	8.83
26	#2 FO	25	100	Off	8.0	13.9	4.0	4.2	1.3	0.8	5	3.2	0.0660	29.5	0.0515	23.0	0.0200	8.93
27	#2 FO	25	75		8.0	11.1	4.0	3.4	1.3	0.6	5	2.6	0.0660	23.5	0.0515	18.3	0.0200	7.13
28	#2 FO	25	50		8.0	8.4	4.0	2.6	1.3	0.5	5	1.9	0.0660	17.9	0.0515	14.0	0.0200	5.42
29	#2 FO	50	DB		8.5	14.6	4.0	4.2	1.3	0.8	5	3.2	0.0610	29.3	0.0475	22.8	0.0182	8.74
30	#2 FO	50	100	Off	8.0	13.7	4.0	4.2	1.3	0.8	5	3.2	0.0660	29.2	0.0515	22.7	0.0200	8.83
31	#2 FO	50	75		8.0	11.0	4.0	3.3	1.3	0.6	5	2.5	0.0660	23.3	0.0515	18.2	0.0200	7.07
32	#2 FO	50	50		8.0	8.3	4.0	2.5	1.3	0.5	5	1.9	0.0660	17.6	0.0515	13.7	0.0200	5.34
33	#2 FO	75	DB		8.5	14.6	4.0	4.2	1.3	0.8	5	3.2	0.0610	29.3	0.0475	22.8	0.0182	8.72
34	#2 FO	75	100	On	8.0	13.7	4.0	4.2	1.3	0.8	5	3.2	0.0660	29.1	0.0515	22.7	0.0200	8.81
35	#2 FO	75	75		8.0	10.4	4.0	3.2	1.3	0.6	5	2.4	0.0660	22.2	0.0515	17.3	0.0200	6.72
36	#2 FO	75	50		8.0	7.9	4.0	2.4	1.3	0.4	5	1.8	0.0660	16.9	0.0515	13.1	0.0200	5.11
37	#2 FO	85	DB		8.5	14.6	4.0	4.2	1.3	0.8	5	3.2	0.0610	29.2	0.0475	22.7	0.0182	8.71
38	#2 FO	85	100	On	8.0	13.7	4.0	4.2	1.3	0.8	5	3.2	0.0660	29.1	0.0515	22.7	0.0200	8.80
39	#2 FO	85	75		8.0	10.1	4.0	3.1	1.3	0.6	5	2.3	0.0660	21.4	0.0515	16.7	0.0200	6.48
40	#2 FO	85	50		8.0	7.7	4.0	2.3	1.3	0.4	5	1.8	0.0660	16.3	0.0515	12.7	0.0200	4.95





Gerallyn Duke/R3/USEPA/US

07/13/2009 03:52 PM

To BHalchak@state.pa.us

cc

bcc

Subject Comments on Proposed Plan Approval for UGI Development Company

Hello Brian. Below are my comments on Proposed Plan Approval 40-328-006.

1. Is Unit 4 part of the facility for title V purposes? If so, should netting be needed, Unit 4 should be included in the analysis. If not, I'd appreciate learning why PADEP determined these are separate facilities and not "units under common control".

2. Page 7 of the draft Review Memo, bullet three states that avoided emissions are greater than startup/shutdown emissions. Can you please clarify that in light of the preceding bullet on page 7?

3. Please provide baseline actual emissions for NOx and VOCs that were used to calculate the increases listed on page 8 of your review memo. Am I correct in understanding that the PTE for the Project will be 46.8 for NOx and 9.608 for VOC?

4. A PSD analysis would not be needed in this case for NOx and VOC, as these are subject to an NSR applicability determination. A (1) should be included in the last column on the table on page 10 for NOx, or, even better, the rows for NOx and VOCs should be omitted.

5. Are the "Project Emission Increases" for NOx and VOCs listed on page 10 of the Permit Review Memo not the same as those listed on page 8 because Unit 6 is included in the netting but not the determination of increase? Please explain why these emissions are not the same and note that the same "increase" determined in Step 1 should be used in Step 2, from which contemporaneous increases and decreases are added/subtracted to produce a net emissions increase/decrease.

6. Please provide the details on the contemporaneous increases and decreases that are summarized on page 10 of the Permit Review Memo.

7. Have you fully evaluated EPA's March 16, 1995, "Potential to Emit for MACT Standards-Guidance on Timing Issues", which is also known as the "Once In Always In" policy, in the context of whether 40 CFR Subpart Yyyy applies? This policy clarifies that facilities that are major sources of HAPs on the first compliance date of the standard must comply permanently with the MACT standard to ensure that maximum achievable reductions in toxic emissions are achieved and maintained. We can discuss this further after checking the Title V Policy & Guidance Database.

As always, please contact me with any questions or concerns. Thank you for this opportunity to comment. I look forward to your response.

Gerallyn Duke  
EPA Region III 3AP11  
1650 Arch Street  
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215-814-2084

**1. Is Unit 4 part of the facility for title V purposes? If so, should netting be needed, Unit 4 should be included in the analysis. If not, I'd appreciate learning why PADEP determined these are separate facilities and not "units under common control".**

UGI Response

Unit 4 is not part of the UGI Hunlock Creek Title V permit. Unit 4 is owned and operated by Allegheny Energy. Allegheny Energy leases the land from UGI occupied Unit 4. UGI exercises no control over the operation of Unit 4.

**2. Page 7 of the draft Review Memo, bullet three states that avoided emissions are greater than startup/shutdown emissions. Can you please clarify that in light of the preceding bullet on page 7 "While unit emissions rates (lb/mmBtu) are higher at part load, total emissions (lb/hr) are lower for all criteria pollutants".**

UGI Response

During unit startup and shutdown the instantaneous emission rates for certain pollutants will be higher than during steady state normal operations. A typical startup, defined as from initial fuel firing to combustion turbine steady state operation (approximately 50% load), is expected to take approximately 1 hour while a typical shutdown, defined as from when steady state combustion turbine operating load falls below normal operations to cessation of fuel firing, is expected to take approximately 30 minutes. These times, especially the startup time, will mostly be a function of how long the unit has been down. The project will be dispatched based on the electric needs of the grid. Typical minimum down times between unit operations is expected to be 4-8 hours during peak electric demand periods. The avoided emissions, i.e., the emissions that would have occurred had the unit been operating are greater than the elevated emissions due to unit startup/shutdown. Therefore for the calculation of annual potential to emit the worst-case is unit operations at full load for 8,760 hours per year.

When the unit is operating at less than full load, but not in a startup or shutdown condition, some emissions when expressed as pounds per million BTUs (lbs/mmBtu) may be higher at part load than at full load. Since the heat input rate at part load is less than at full load the actual amount of emissions in pounds per hour (lbs/hr) will always be greater at full load than at partial load.

**3. Please provide baseline actual emissions for NO<sub>x</sub> and VOCs that were used to calculate the increases listed on page 8 of your review memo. Am I correct in understanding that the PTE for the Project will be 46.8 for NO<sub>x</sub> and 9.608 for VOC?**

UGI Response

The Boiler #6 historical emissions are provided in the table below. The Emissions Reduction Credit (ERC) application was filed in September 2008. The Project PTE is 46.8 tpy for NO<sub>x</sub> and 9.608 tpy for VOC.



**Boiler #6 Historical Emission (tpy)**

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<i>Pollutant</i>	<i>2007</i>	<i>2006</i>	<i>2005</i>	<i>2004</i>	<i>2003</i>	<i>2006-2007 Average</i>
SO <sub>2</sub>	3,586.0	4,405.0	4,482.0	3,657.0	3,270.2	3995.5
NO <sub>x</sub>	558.0	493.9	451.2	552.2	425.3	526.0
PM <sub>10</sub>	277.9	278.8	266.0	293.6	243.8	278.4
PM <sub>2.5</sub>	238.7	238.6				238.2
CO	48.70	42.21	41.91	45.61	41.41	45.46
VOC	5.71	5.20	5.41	5.71	4.92	5.46
Pb	0.0090	0.0200	0.0200	0.0200	0.0100	0.01
H <sub>2</sub> SO <sub>4</sub>	3.65	3.75	3.50	3.74	3.38	3.70

**4. A PSD analysis would not be needed in this case for NO<sub>x</sub> and VOC, as these are subject to an NSR applicability determination. A (1) should be included in the last column on the table on page 10 for NO<sub>x</sub>, or, even better, the rows for NO<sub>x</sub> and VOCs should be omitted.**

**UGI Response**

A PSD analysis is required for NO<sub>x</sub> as NO<sub>x</sub> is a criteria pollutant unto itself and the area is designated as attainment for NO<sub>x</sub>. NO<sub>x</sub> is also a precursor for ozone and since the area is designated as nonattainment for ozone a nonattainment new source review analysis is required for NO<sub>x</sub>. VOC does not have this dual pollutant identify, therefore, only a nonattainment new source review analysis is required under the ozone nonattainment area status.

**5. Are the "Project Emission Increases" for NO<sub>x</sub> and VOCs listed on page 10 of the Permit Review Memo not the same as those listed on page 8 because Unit 6 is included in the netting but not the determination of increase? Please explain why these emissions are not the same and note that the same "increase" determined in Step 1 should be used in Step 2, from which contemporaneous increases and decreases are added/subtracted to produce a net emissions increase/decrease.**

**UGI Response**

The table on page 10 was copied from the original permit application submitted in 2007 and is now out of date. A revised table is provided below based on the emission rates as agreed upon in the draft plan approval and revised Boiler #6 net emission decreases based on actual emissions data from 2006-2007. The most recent Boiler #6 net emissions decreases are provided in the response to Question #3.

## Summary of PSD Netting Analysis

<i>Pollutant</i>	<i>PSD Significant Emission Rate (tpy)</i>	<i>Project Emission Increases (tpy)</i>	<i>Boiler #6 Emission Decrease (tpy)</i>	<i>Net Emissions Increase (Decrease) (tpy)</i>	<i>PSD Modification</i>
Carbon Monoxide	100	34.4	45.5	-11.1	No
Nitrogen Oxides	40	46.8	526.0	-479.2	No
Sulfur Dioxide (SO <sub>2</sub> )	40	25.6	3995.5	-3969.9	No
Particulate Matter (TSP/PM)	25	42.3	17.2	24.6	No
PM <sub>10</sub>	15	72.9	278.4	-204.5	No
PM <sub>2.5</sub>	10	72.9	238.2	-165.3	No
Ozone (Volatile Organic Compounds)	40	9.6	5.5	4.1	(1)
Lead	0.6	0.002	0.019	-0.017	No
Asbestos	0.007	NA			No
Beryllium	0.0004	0.00004			No
Mercury	0.1	0.0002			No
Vinyl Chloride	1	NA			No
Fluorides	3	NA			No
Sulfuric Acid Mist	7	8.7	3.7	5.0	No
Hydrogen Sulfide	10	NA			No
Total Reduced Sulfur Compounds	10	NA			No
(1) Area is designated as nonattainment for ozone; therefore, PSD is not applicable to this pollutant.					

**6. Please provide the details on the contemporaneous increases and decreases that are summarized on page 10 of the Permit Review Memo.**

UGI Response

The most recent Boiler #6 net emissions decreases are provided in the response to Question #3.

**7. Have you fully evaluated EPA's March 16, 1995, "Potential to Emit for MACT Standards-Guidance on Timing Issues", which is also known as the "Once In Always In" policy, in the context of whether 40 CFR Subpart YYYY applies? This policy clarifies that facilities that are major sources of HAPs on the first compliance date of the standard must comply permanently with the MACT standard to ensure that maximum achievable reductions in toxic emissions are achieved and maintained. We can discuss this further after checking the Title V Policy & Guidance Database.**

## UGI Response

The referenced EPA guidance memo states that facilities may switch to area source status at any time until the "first compliance date" of the standard. For new sources (i.e., the proposed combustion turbine) this date is either upon startup or no later than the promulgation date of the standard, whichever is later. For the proposed project the compliance date would be the startup date. Boiler #6 will be shut down prior to the startup of the new unit. This requirement will be federally enforceable and is contained within the draft Plan Approval. Once Boiler #6 is shutdown the facility PTE will be less than the 10/25 tpy HAP major source thresholds and the facility would qualify for area source status per the referenced guidance memo. Based on the example under the section "Applicability of Multiple MACT Standards to a Single Facility" in the guidance memo it would appear that the guidance indicates that the combustion turbine MACT standard would not apply as the facility would have switched to area source status prior to the applicability of subpart YYYY.

Regardless of the above, on August 18, 2004 (Federal Register / Vol. 69, No. 159) EPA stayed the effectiveness of the Subpart YYYY requirements for stationary lean premix and diffusion flame combustion turbines firing gas and when all turbines fire oil no more than 1,000 hours annually. The proposed combustion turbine is limited to the fuel equivalent of 600 hours per year at full load. The stay suspended the requirements to apply pollution controls and associated operating, monitoring, and reporting requirements for these source types. These source types must still comply with the Initial Notification requirements set forth in § 63.6145 but need not comply with any other requirement of subpart YYYY.

Page 1 Description

- - Insert “nominal” before 50 MW
- - Insert “supplementary fired” before heat recovery
- ▪ Insert “Oxidation” before Catalyst

Page 5 Equipment List and Permit Maps CT5 and CT6 – Do not recognize supplementary-fired HRSG

- Insert “supplementary fired” before HRSG
- Modify Capacity/Throughput as follows:
  - Either insert “Combustion Turbine” after 471,2000 cf/hr and add “38,900 cf/hr Duct Burner and a new line, or
  - Change 471,200 to 510,100 to reflect both combustion turbine and duct burner which is natural gas only, or
  - Create new combustion units for HRSG duct burners C07, C08 with capacity of 38.9 MMBtu/hr

Page 13 Section C. #010 (a)(1) – typographical error change “nay” to “any”

Page 15 Section C #019 (f) – requires a reference section for the cited Condition

Page 15 Section C #020 (b) – Delete reference to “two cooling towers”

Page 16 Section C #021 (b) – Delete this requirement. The project is not subject to the provisions of 25 PA Code Section 127.12b, therefore, usage of distillate fuel oil is not contingent upon natural gas shortage.

Page 17 Section C #025 – Delete reference to “two cooling towers”

Page 17 Section C #028 – Modify required ERCs as follows:

- NO<sub>x</sub> = 7.0 tpy
- H<sub>2</sub>SO<sub>4</sub> = 2.0 tpy
- SO<sub>2</sub> = 0.0 tpy
- PM<sub>10</sub> = 58.0 tpy

These are the minimum amounts required for netting purposes.